Lesson Five: *Medical Pain Relief, Interventions, and Procedures*

"Medical interventions during labor should be done FOR you and not TO you."

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Welcome back, Mom, to Lesson Five!

In Lesson Four, we talked about decision-making and informed consent. The BRAIN Method is a great way to gather all the information you need to give informed consent for any medical procedure or treatment.

In this lesson, we're going to cover possible medical interventions, procedures, and medical pain relief options.

Having an unmedicated birth is not for every mom. You need to know all your options to make good decisions for yourself. Even when you want and plan for a natural birth, sometimes medical situations must be addressed. Or you may just change your mind and opt for pain relief medication. You need to learn about natural and medical pain relief to prepare for birth.

Interventions

An intervention is an interruption to the natural birth process by a medical procedure or medical pain relief. This lesson will touch on the most common interventions.

Often an intervention becomes a catalyst for a "cascade of interventions," which is a series of more interventions brought on by a procedure or medication.

Some Scenarios for a Cascade of Common Interventions

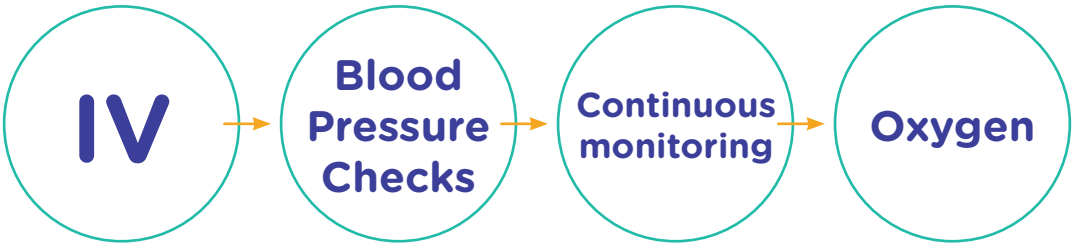
Epidural Cascade of Interventions

When you get an epidural, you'll need other interventions as well. So, when you ask for an epidural, you will get...

Now you can see all the different procedures you'll have when getting an epidural, and there could more depending on your situation.

Pitocin Cascade of Intervention

When you get Pitocin to start your labor or speed up your contractions, you will also receive:



Now you can see all the different interventions required when Pitocin is administered.

Common Interventions

Now let's go over some common interventions.

IV Insertion

An IV is inserted in your hand or arm to administer fluids for hydration or medicine. There are times when IV medication is necessary. They are:

- **Group B Strep**

  If you test positive for Group B Strep, a common bacterium that lives in the intestines and can move down to the vagina or rectum, you will need an IV. Ten to 30 percent of pregnant women carry Group B Strep, which can cause serious infections for babies exposed during birth. Moms are tested at around 37 weeks. If positive, you will be given IV antibiotics intermittently during labor. If an IV is only used intermittently, a saline lock can be put in place so that you can move around freely. A saline lock is a small cap placed at the end of the catheter (the thin, sterile tube part of the IV) while the IV catheter remains in the hand or arm.

- **Hydration**

  It is critical to stay hydrated during labor. Therefore, you should be encouraged to drink fluids unless otherwise directed by your provider. However, if you become dehydrated, you may be asked to take IV fluids.

Please note that there is a balance to the amount of fluids your body needs. Studies show that too much can affect breastfeeding, engorging the breast and making it difficult for the baby to latch correctly. It can also cause a buildup of excess fluid in the baby. A baby will urinate the excess fluid, potentially causing them to lose more than 7 percent of their birth weight. If this happens, moms may be encouraged to supplement with formula, which can have a negative impact on breastfeeding.

Oxygen

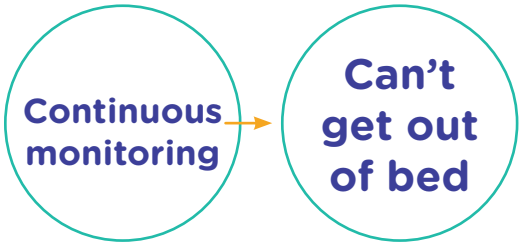
If your oxygen levels drop during labor, you may be given oxygen through a facemask or cannula. Likewise, the baby's heart rate might show a need for some additional oxygen during contractions. You will be restricted to bed when you are receiving oxygen.

Monitoring

Medical staff will monitor you and your baby during labor. They will monitor your blood pressure, oxygen, and heart rate after arriving at the hospital or birthing center. Likewise, they will monitor your contraction patterns and your baby's heart rate by strapping two discs to your belly. The top disc shows when you have a contraction, and the bottom disc records the baby's heart rate. The medical team will take a baseline recording and typically remove the monitors. After this, they are used periodically during labor to ensure everything is going as expected. A handheld monitor may also check the baby's heart rate. There are situations where the monitor must remain on continuously, such as when you have a medical condition, are given medication or an epidural, or medical staff is concerned with the baby's heartrate. Some wireless monitors enable freedom of movement so mom can change positions.

There are times when the medical team will suggest internal monitors. For example, if there is a question about how strong the contractions are, an internal uterine pressure catheter can be inserted. This is a small plastic tube that goes into the uterus to measure the strength of each contraction.

Also, an internal fetal monitor may be needed when the external disc is not accurately reading the baby's heart rate. This monitor has a wire that is attached to the baby's scalp but doesn't hurt the baby. Internal monitoring is continuous, and you must remain in bed.



There are some drawbacks to continuous monitoring. The biggest is the restriction of movement. It also increases the likelihood of a cesarean birth because of non-reassuring fetal heart tones, the second most common reason for first-time cesarean deliveries in the United States.

Induction

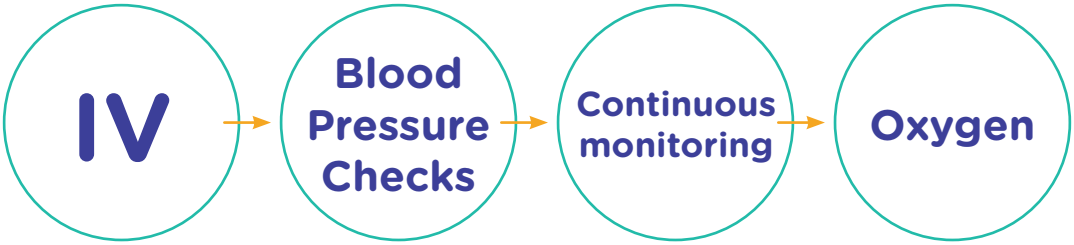
Induction means starting labor through medical means. You should be induced for medical reasons only. There are several methods used to induce labor.

Sweeping the membranes is when the medical provider uses his gloved finger to separate the bag of water from the lower wall of the uterus to trigger the hormones that start contractions.

Prostaglandins are hormones in tablets or gel form placed in the vagina near the cervix. You would need to remain in bed while the tablet or gel dissolves.

10) Rebecca Dekker, PhD, RN; Anna Bertone, MPH, "The Evidence on: Fetal Monitoring," Evidence-Based Birth, July 17, 2021, updated May 21, 2018, https://evidencebasedbirth.com/fetal-monitoring/, accessed December 13, 2021.

Pitocin is a synthetic form of oxytocin hormone given through an IV drip to begin or speed up labor. It is started at a low dose because it can cause rapid and strong contractions. These stronger contractions could be stressful for the baby and you, so you will be continuously monitored.

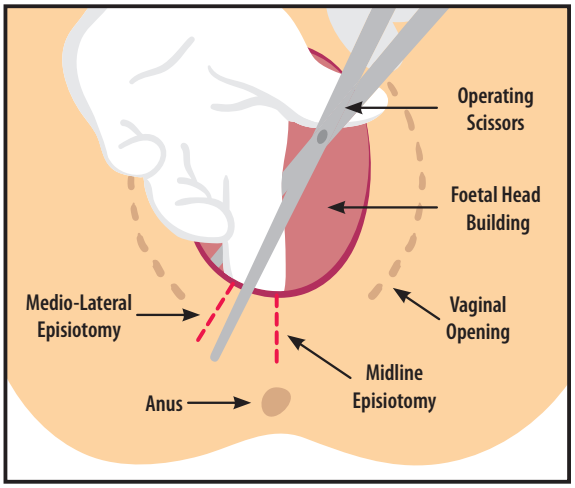


A Foley catheter inserted into the cervix can be used to induce labor. Your healthcare provider will slowly inflate the catheter to open the cervix.

Breaking the water will also encourage stronger contractions. If the contractions are not opening the cervix, or if they're not close enough together, last long enough, or strong enough, then the provider can break your bag of water to speed up labor.

Second-Stage Medical Procedures

There may be medical interventions that happen during the second stage of labor, the pushing stage. Let's look at a few.



Episiotomy. An episiotomy is a small surgical incision made at the opening of the vagina to widen it and prevent tearing. Episiotomies used to be done routinely in labor, but newer research shows they don't always prevent extensive vaginal tears as initially thought. The pushing stage, especially for first-time moms, can last around two hours because tissues need to stretch gradually to avoid tearing. Therefore, you must listen to the medical team when they advise you to slow down or stop pushing so that your tissues have time to stretch. However, there are times when an episiotomy is warranted, such as if the baby's shoulder is stuck behind your pelvic bone or if there are irregular fetal heart tones during delivery and the baby needs to be born quickly. It is also done when forceps or vacuums are used to assist in delivery.

Forceps and vacuum. Forceps are two long, spoon-shaped metal instruments inserted into the vagina and go around the baby's head to guide baby out gently while you push. A vacuum is a machine that uses suction to help pull the baby out while you push. It uses a soft, plastic suction cup placed on the baby's head. An assisted delivery can happen because:

- Of concerns about baby's heart rate.
- You have pushed for a long time, but the baby's head has stopped moving down the birth canal.

- You are exhausted from a long labor.
- A medical condition limits your ability to continue pushing safely.

The risks to assisted birth are:

- Injury to your vaginal tissues and perineum (the area between the vaginal opening and the anus).
- Injury to the baby's head, face, or neck.

Medical Pain Relief Options

Narcotics

Narcotics are systemic analgesics, meaning they affect the entire body, but they don't take away all the pain. Some have a calming effect and take the edge off the pain. The most used narcotics in the United States are:

- Fentanyl
- Morphine
- Stadol

Hospitals and birthing centers offer different medications, so you will need to check with your healthcare provider about which medicine is available. The side effects are like any prescribed narcotic pain reliever. You can experience:

- Drowsiness
- Nausea
- Itching
- Lightheadedness
- Breathing problems

Narcotics can get into the baby's bloodstream, causing them to experience many of the same side effects. Because of this, providers will not administer them too close to delivery. It's also important to know that the number of injections is limited because its effectiveness decreases after the first injection. Unlike epidurals, a nurse can administer a narcotic.

Narcotics may be a good choice if you want to avoid an epidural but need something to take the edge off. However, if you have had a negative experience with a narcotic, you might want to avoid them.

Epidurals

The epidural is a commonly used anesthetic pain reliever. An anesthesiologist or a nurse anesthetist under the supervision of an anesthesiologist must administer it. It affects the area from under the breast to the pelvis and takes away some or most of

the pain. Most people rate their pain relief from an epidural as excellent or very good. To get an epidural:

1. A specially trained doctor or nurse will clean your back.
2. Next, they will administer a numbing injection in the lower back.
3. You will be asked to curl your back to open the vertebrae.
4. The needle is inserted into the epidural space below the spinal cord, a small plastic catheter is threaded into the space, and the needle is removed.
5. The catheter is connected to a machine that delivers medication into the epidural space.

It can take as long as fifteen minutes for you to feel a difference in your contractions.

Once you have the epidural, you must stay in bed because your lower body and legs may be too numb to support you. In addition, you will require IV fluids to maintain blood pressure, have your blood pressure continuously monitored, have a urinary catheter installed, and continuous fetal monitoring for the remainder of labor.

Some of the risks are:

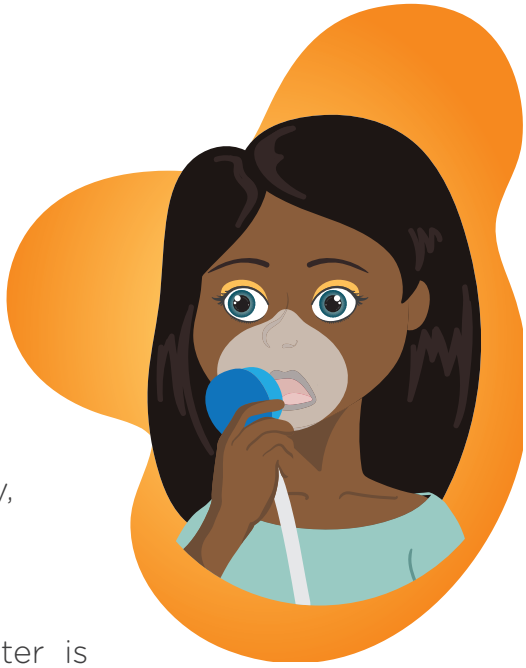
- The epidural may not be as effective as expected or could be patchy.
- The first stage of labor may be slowed down because your movements are restricted, thus increasing the likelihood of Pitocin.
- Assisted delivery with vacuum or forceps is more likely.
- You can experience a fever or itchiness as a side effect.

Nitrous Oxide (Laughing Gas)

Nitrous oxide is available in some hospitals and birthing centers. It is a systemic drug that affects the entire body and is inhaled through a mask. Nitrous oxide has a similar level of pain relief as injectable narcotics but without the same side effects for the baby. The pain relief begins working in about a minute, so it's best to inhale it thirty to forty seconds before the next contraction. You control when to inhale and when to put the mask on or take it off. Nitrous oxide can help you calm down and relax to lessen the pain sensation.

Some side effects of nitrous oxide are:

1. Dizziness or nausea.
2. Mask phobia, or claustrophobia because of the mask on Mom's face.



Acupuncture

Acupuncture is part of traditional Chinese medicine. It involves inserting thin needles into specific parts of the body. A trained practitioner provides this service and must come to the hospital or birthing center. Unfortunately, the research on its effectiveness or risk is minimal.

Sterile Water Injections

Sterile water injection is a procedure where sterile water is injected just under the skin in the lower back. You can receive the injections any time during labor. Research has shown that it releases endorphins to help alleviate pain. The American College of Obstetricians and Gynecologists states that sterile water injections have demonstrated statistically significant reductions in pain in many studies. In addition, because it is a drug-free procedure, there are no drug-related side effects. However, there is a small risk of infection at the injection site.

Nurse's Note: *Managing Pain in Labor and Delivery*

> *Labor can be uncomfortable and even painful. No two labors are the same, and no two women have the same amount of pain. Labor pain intensity is affected by the size and position of the baby and the strength of the contractions. There are no right or wrong ways for a mother to manage their pain during labor. Mothers can learn and practice the natural comfort techniques previously discussed. If needed, a mother can add medications during the painful labor and delivery. The healthcare team will provide pain management options and support the mother's choice of pain management.*

You have a lot to consider. It's important to understand the cascade of interventions so you're aware of all the procedures that come with each choice you make. You may end up with more medication, equipment, and procedures because of the first medication or procedure you agree to.

In the next lesson, we will talk about planning for the birth and how to make a birth plan so that you can have the birth experience you want.

Don't forget to complete your homework before the next class.

My Notes: